

Memorandum

DATE: February 18, 2004

TO: Region Preconstruction Engineers, Project Managers, Design Engineers, and Design Consultants

FROM: Jason Davis, P.E.
Engineering Services Director, Project Development

SUBJECT: Use of Subsurface Utility Engineering (SUE) on UDOT Projects

Note: The attached memo is revised from the memo dated January 23 and sent to you on February 6 and posted to Web on February 9.

Transmitted herewith is a copy of Section 5.4, GPS Requirements, from Administrative Rule R930-6, Rule for the Accommodation of Utilities and the Control and Protection of State Highway Rights of Way. This edition of the Rule was adopted in September of 2003.

The section I have attached states that utility companies are responsible to maintain reproducible plans and electronic files of the location of their facilities within State Highway rights of way. It further states: "If the utility company does not have the plans and files showing the location available to give to UDOT when requested, then it is the responsibility of the utility company to obtain the actual location of their facilities at their own expense. If the utility fails to provide the information required by UDOT within the schedule established by UDOT, UDOT will hire a Subsurface Utility Engineering consultant and bill the utility company for the cost of locating their facilities."

Joint Studies conducted by FHWA and Purdue University show a savings of greater than 4:1 when SUE is used properly. Experience using SUE at UDOT has shown significant savings on several projects, but the key is obtaining the SUE information at the proper time during the design process. At the Utility Coordinators Meeting held on December 2, 2003, Michael Seely, the Chief Utility and Railroad Engineer, instructed the Utility Coordinators to begin requesting Accuracy Level B (defined as ± 1 foot in X & Y directions) information from Utilities during Phase 16D of every project that has the potential to impact utilities. Project survey information will be provided to the Utilities. Utility companies with facilities within the project limits must submit Microstation formatted drawings showing their existing locations within a mandatory time. A due date of 30 days is suggested, but may be modified due to the scope of the project. If we have not received the information from the utilities by the date specified, we are instructed to obtain a SUE provider from the consultant pool and have the location work performed. The cost of the SUE will then be prorated and billed directly to the utility companies not providing information. It is under the authority of R930-6-5.4 that we are instructed not to participate in the cost for utility companies to perform this SUE work. It must be noted, however, that publicly

owned or governmental utilities (including those owned by cities, special service districts and irrigation companies) will not be required to pay for their SUE work. The SUE work becomes a part of the project cost, just as relocation work for these entities is 100% reimbursable. It is therefore advisable that some SUE costs be built into each project budget to account for these utilities.

Once the horizontal location of the existing facilities is accurately established and the design of the project proceeds, UDOT can evaluate the potential conflict points and if necessary, request utility companies to provide Level A information (defined as $\pm 3/4$ inches in X, Y, and Z directions). The purpose of this is to control and minimize the amount of actual potholing required to provide the necessary information while minimizing the cost to the utility companies.

The Federal Program Guide for the Relocation and Accommodation of Utilities also states "The FHWA should not participate in any construction delay claims caused by conflicts with underground utilities that would have been avoided if subsurface utility engineering had been used." Thus, while there is an initial cost for obtaining this information, we risk delays during construction if it is not done, as well as risking losing money from the FHWA if a delay claim is denied for Federal reimbursement. Subsurface Utility Engineering should be performed on all UDOT projects to prevent this from happening.

Please consider the basis for this determination, and proceed to implement this process on your projects. It is our intention for the enforcement of this rule to be implemented consistently and uniformly statewide, to prevent any impression of arbitrary enforcement.

Thank you for your support in helping to reduce utility conflicts. Experience has shown that these measures will assist us all in the long run. If you have any questions or concerns, please contact your region Railroad & Utility Coordinator, or Michael Seely at (801) 965-4176, and we will assist you in any way we can.